

Killian Stresses Specialism Need

Student Must Be Able To Achieve Competence

"We must prepare men to be skilled and creative. For his own dignity of soul a man must be able to do at least one thing extremely well. He must be able to achieve this." This point was one of the goals of education in a free society as seen by President James R. Killian, Jr., in his address before the Lecture Services Committee on "Education for Freedom" held last Thursday.

Dr. Killian also stressed an understanding of our social heritage and of the concept of individual liberty, and growth in moral and spiritual stature with the development of a "hierarchy of values."

Unresponsible Influences

Other speakers included Dr. J. S. Bixler, president of Colby College; Prof. Crane Brinton of Harvard University and Prof. J. H. Keenan of the Department of Mechanical Engineering. Moderator was Dr. Karl Deutsch of the Department of English and History.

President Killian added that education is the total of those influences that prepare the individual to be a free man in a free society. He warned that the radio, movies, and press have assumed "much of the influence and desperately little of the responsibility."

"Education in a democracy must cultivate the aristocratic values of personal dignity, self-reliance, and self-understanding; and the altru-

(Continued on Page 4)

Rockwell Cage Scene Of Sig. Corps Display

A vast exhibit of television, radio and their use in modern warfare was displayed by the Signal Corps in Rockwell Cage on December 7, 8, 9. The exhibit showed the manner in which the corps is adopting television, radio, radar, and electronics for the use of specialized units of the army.

One point of interest was a television camera and a cable chain connected with several television sets which showed the visitors how they appear on the TV screen. The new field radio equipment though small in size has been so made that the soldier on the battle front can have direct connection to the Pentagon if necessary.

Tracking of guided missiles by radar and long range communication by bouncing signals off the moon constituted another interesting panel of the exhibit. The Institute showing was preliminary to the public display in the First Corps Cadets Armory December 12 to 16.

Coed Seniors, Grads May Apply For WAC Officer Commissions

Coed college seniors and graduate students are now eligible to apply for reserve commissions in the Women's Army Corps, according to a statement issued last week by Col. Charles F. Baish, PMS & T. Those accepted will receive direct commissions as second lieutenants in the WAC Reserve, and be ordered to active duty to attend a basic course at Camp Lee, Virginia. At the completion of the course, the trainees may apply for commissions in the Regular Army.

Applications may be made by women between 21 and 27 years

(Continued on Page 3)

Triad Graced By Sigma Chi Sweetheart



Photo by Astracian

Presiding queen at the Miami Triad last Friday night was beautiful Dorothy Grover, national sweetheart of Sigma Chi fraternity. Doty is presently attending Syracuse University and is a member of Kappa Alpha sorority. Before college she served three years as a professional model appearing as cover girl on no less than 19 leading magazines. But pulchritude is not Doty's only forte—she is currently co-holder of the Canadian National Championship in water skiing.

TECHNIQUE OPTION SALES END FRIDAY

As has been the policy in the past, Technique Option prices will be advanced after Christmas. The current Option sale ends this Friday. Options are on sale daily in Building 10.

This year's Technique will have in it a "Sweetheart" section. Those holding Options may submit their girl's picture for this section. Details are available at the Option Desk in Building 10.

"Operation Octopus" Studies Human Communication Here

By ED EIGEL

"Human Communications Research Group" is the name of an organization of which very few students at the Institute have ever heard. Working in Building 20, the group is conducting experiments which are concerned with the influence of the pattern of communication of a group on its performance as a unit.

The theory that the properties of a group working together are related to its network of communication is the working basis for the experiments. A general outline of these experiments is as follows: A group of people are given a problem to solve. This problem is one which requires the cooperation of the whole group. It cannot be too easy, and yet it must be flexible, so that minor changes can be made in order that repetition will not reduce the problem to merely plugging values in a formula and turning the crank. After the group and problem are selected, the pattern of communication is set up. This consists of permitting each member of the group to communicate only with certain designated members from the remainder of the group.

Adaptability Important
Thus, when the pattern of com-

Report On Educational Survey To Be Discussed By Faculty Over WMIT

Four faculty members and three students will discuss some aspects of the Educational Survey Report on WMIT on Wednesday, December 13, at 9:00 p.m. All the members of the faculty panel have been instrumental in the drafting or the execution of the Educational Survey Committee recommendations.

Answering the questions of the students will be Professors Warren K. Lewis and Walter G. Whitman and Provost Julius A. Stratton. Professor Douglass V. Brown will be moderator. Questions will come from David A. Grossman '51, of the Architecture Department; Thomas G. Hagan '51, and Sander Rubin '50, Editor and ex-Editor of *The Tech*, respectively.

The faculty panel is expected to reveal just what may be expected to come of the Report's recommendations. Also to be discussed are parts of the philosophy lying behind the recommendations, what is a professional education, how long it should take to develop a professional man and the role of an undergraduate school in a professional education.

With respect to the School of Architecture, the panel will discuss the five-year program and why it is peculiar to that department.

Baker Drive At \$4300

As of Monday night 40% of the students had contributed 4300 dollars to the Baker Memorial Fund. The Drive will include contacting the remaining 60% of the Student Body during this week.

A special Air Force ROTC course leading to a commission in the reserve air corps will be put into effect next semester. Any Junior, Senior, or Graduate student who has completed the two-year basic course in Military Science or who is a veteran with one year's service, is eligible to enroll.

Applicants should have at least a 3.0 cum and be in good physical condition. Men with a cum below 3.0, must have their application approved by the Petitions Committee. All applications must be in before February 5. Members of the course will be chosen from the applicants by the Professor of Air Science and will sign a draft deferment agreement.

Two Programs

Accepted seniors and graduate students will take one course at the Institute during the spring term and will attend summer camp. They will receive their commissions at the end of the summer. Juniors will be asked to take three terms of courses and will receive their commissions at the end of summer camp in 1952.

Pay Schedules

Students will be paid at the rate of \$90 a day during the school year and will receive \$75.00 a month at summer camp. These are the same as the rates applying to the regular advanced ROTC.

The plan offers opportunities in the fields of aircraft maintenance engineering, communications, armaments, and air installations. No flying training is offered. However after being commissioned, officers may apply for flight school.

Concert Band To Give Performance Friday In Huntington Hall

The M.I.T. Concert Band will perform on December 15, at 4:30 p.m., in Huntington Hall. Included in the program of the concert is "Oedipus in Colonus," "Ave Maria," three movements from the "Clarinet Quartet" by Crosse, "Minuet and Saraband" by Bach, the Allegro from the "Eine Kleine Nachtmusik" by Mozart, Prelude to "Hansel and Gretel," four Christmas Carols, and "Christmas March" by Goldman. The same program with the addition of the "Fanfare" by the Brass Choir will be given on December 13, at 7:00 p.m. at the Parkman Bandstand, Boston Common.

LIFT SHIFTS

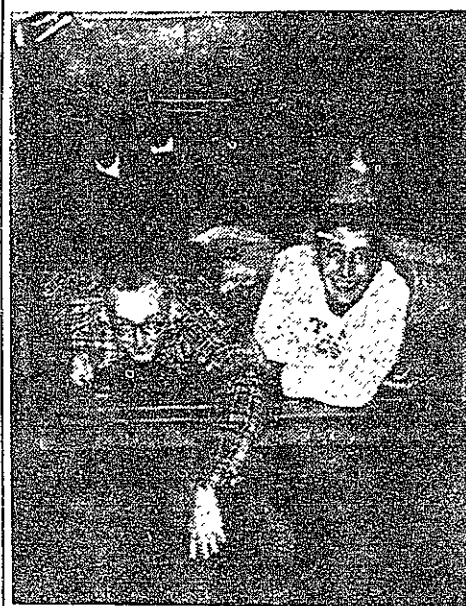


Photo by Kahnt

Dan Sullivan '52 and Ralph Romano '51 dangle dreamily from an enigmatic elevator that recently began feeling its "Otis" in the Baker House.

2 Juniors Attend U.S. Affairs Parley

Among the 130 college students who took part in the Second Annual Student Conference on United States Affairs were two honor students from Technology, Edwin W. Pettitt '52 and Gerhard Hover '52. The conference was held at West Point, and from December 6 through 9 the students discussed "Problems and Objectives of the 1950's: the Far Eastern Policy for the United States."

Principal speakers at the conference included Lt. General A. M. Gruenther of the U. S. Army and Dr. Edward Earle who considered political, economic and security views on the subject. At a banquet on the last day the assembly was addressed by Dr. Joseph Johnson, the president of the Carnegie Endowment for International Peace.

Literary Works To Be Featured In "The Tech"

In an unparalleled and unprecedented effort to provide a medium of expression for students with creative writing talent, *The Tech* will present its first literary supplement before the close of this term.

Scheduled for publication early in January, the supplement will be wholly composed of material submitted by members of the student body at large. Contributions, typed or legibly written in ink, are welcome any time before the deadline, December 16. Material should be sent, via Institute Mail, to *The Tech*, Walker Memorial.

Students have previously attempted to start such a magazine, but such efforts were found to be incapable of independent operation.

Marvin C. Grossman '51, General Manager of *The Tech*, stated, "If student response approaches the level which is indicated, the publication will be a success—a success as a medium to express the creative talent which the Institute harbors, and an equal success as a means of enriching student life at Technology."

SHEEAN DELAYED

The lecture planned for Monday by the Lecture Series Committee was not held because speaker Vincent Sheean was unavoidably detained by bad weather. Instead it will be held tomorrow afternoon at 5:00 p.m. in 10-250. Ticket holders who find it impossible to attend because of the rescheduling may obtain a refund.

The Tech

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CALENDAR OF EVENTS

DECEMBER 13 TO DECEMBER 20, 1950

WEDNESDAY, DECEMBER 13

Electrical Engineering Department. Colloquium: "Applied Research on Electrical Components." John Burnham, Chief Engineer, Sprague Electric Company. Room 6-120, 4:30 p.m. Tea served in Room 6-321 at 4:00 p.m.
Catholic Club. "Catholic Action and the Engineer." Brother Joseph McCabe, F.S.C., Assistant Professor at Manhattan College. Room 1-190, 5:00 p.m. All are welcome.
Inter-Varsity Christian Fellowship. "Christmas Holiday or —?" Carlyle B. Roberts, President of the New England School of Theology. Room 5-104, 5:00 p.m.
Karsos Club. Meeting. "Theoretical Resolution of the Opening Moves." Mr. Jeremy S. Connolly. Master's Suite Lounge, Baker House, 5:00 p.m.
Mathematics Society. Lecture: "Maximum Aspects of Eigen Problems in Algebra and Integral Equations." Mr. Robert Davis. Room 4-370, 5:00 p.m.
Pershing Rifles. Meeting for Members. Room 3-370, 5:00 p.m.
Tech Model Aircrafter. Discussion of Indoor and Radio Control Rules. du Pont Room, Building 33, 5:00 p.m.
Varsity Squash Team. Match with Harvard University. M.I.T. Squash Courts, 5:00 p.m.
Chemistry Department. Harvard-M.I.T. Physical Chemistry Colloquium: "Rates and Equilibria of Ionic Reactions." Professor George Scatchard. Harvard University, Mallinckrodt MB 23, 8:00 p.m.

THURSDAY, DECEMBER 14

Committee on Scientific Aids to Learning. Symposium on Documentation honoring twenty visiting European documentation specialists. "The Microtechniques—Microfilm, Microprint, and Microcard." 10:00 a.m. Round Table Discussion on "European and American Practices in Documentation." Library Lounge, Room 14-E310, Charles Hayden Memorial Library, 2:00 p.m. Faculty and Graduate Students invited to attend.
Aeronautical Engineering Department, Mathematics and Mechanical Engineering Departments. Fluid Mechanics Seminar: "Unsteady Motion of Very Small Aspect Ratio Wings." Professor Holt Ashley. Room 7-124, 4:00 p.m.
Civil and Sanitary Engineering Department. Seminar: "Sidelights on Mass Transportation." Edward Dana, General Manager, Metropolitan Transit Authority. Room 1-390, 4:00 p.m.
Physics Department. Colloquium: "Elastic Spectrum of Solids from Temperature Diffuse Scattering of X-rays." Mr. Henderson Cole, Research Assistant in the Physics Department, M.I.T. Room 6-120, 4:15 p.m.
Junior Varsity Squash Team. Match with Newton YMCA. M.I.T. Squash Courts, 5:00 p.m.
Tech Model Railroad Club. Public showing of two General Electric train films in technicolor and sound: "Railroadin'" and "Railroadin' Downtown." Room 1-190, 5:00 p.m.
Young Republican Club. Meeting. Tyler Lounge, Walker Memorial, 5:00 p.m.

FRIDAY, DECEMBER 15

Technology Matrons. The Christmas Tea. The Choral Club will present their annual program of Christmas music. Husbands are invited. The President's House, 3:30-5:30 p.m. Hostesses will be Mrs. Glenn C. Williams and Mrs. Lawrence Heidt.
Mechanical Engineering Department. Seminar: "Measurements of Heat Transfer in De Laval Nozzles." Stephen J. Kline. Room 3-470, 4:00 p.m. Coffee served in Mechanical Engineering Headquarters from 3:30 to 4:00 p.m.
International Association. Open Meeting: "Science is International." Dr. Karl T. Compton, Chairman of the Corporation. New Faculty Lounge, Charles Hayden Memorial Library, 5:00 p.m.
Varsity Hockey Team. Match with Northeastern University. Boston Garden, 7:00 p.m.
Varsity Basketball Team. Match with U. S. Coast Guard. New London, 8:00 p.m.
Associated Students of The Combined Student Staffs of M.I.T. Buffet Christmas Party. Morss Hall, Walker Memorial, 8:00 p.m. to 12:00 M. Membership invitation list only.

SATURDAY, DECEMBER 16

Varsity Rifle Team. Match with U. S. Coast Guard, at New London.
Varsity Swimming Team. Meet with Wesleyan College, Alumni Pool, 2:00 p.m.
Varsity Wrestling Team. Match with Tufts College. Medford, 2:15 p.m.
Varsity Basketball Team. Match with Stevens Institute of Technology, Hoboken, New Jersey, 8:15 p.m.

SUNDAY, DECEMBER 17

Lowell Institute Cooperative Broadcasting Council. SCIENCE ON TRIAL, "Has Science Undermined Religion?" Dr. George R. Harrison, Dean of Science, M.I.T.; Dr. Norbert Wiener, Professor of Mathematics, M.I.T.; Reverend Michael J. Ahern, S.J., Professor of Chemistry and Geology Emeritus, Boston College; Dr. Alexander St. Ivanyi, Lecturer in History, M.I.T.; John Hammond, Senior, Browne and Nichols School; and Edward Neary, Senior, Boston College High School. WHDH & WHDH-FM, 6:00-6:30 p.m.

MONDAY, DECEMBER 18

American Institute of Electrical Engineers—Institute of Radio Engineers. Student Branch. Moving Pictures on "Power By Which We Live," and nomination of officers. Room 3-270, 5:00 p.m.
American Meteorological Society. Boston Student Branch. Official Coast Guard Film: "Weathermen of the Sea" and George Poole, shipboard observer. Room 3-370, 7:30 p.m.

(Continued on Page 4)

off the beat

By RICHARD J. POWELL

The M.I.T. Musical Club's presentation of "The Creation" by Joseph Haydn last Friday night at Jordan Hall can be scored as a thorough success. Musically, it was a wholly satisfying performance, the able soloists were well supported by the chorus and orchestra. Those ticket bearers that came harboring a not altogether unwarranted skepticism, left praising both a majestic work and an interpretive effort reaching far beyond their expectations. Monetarily, the concert met expenses, and thus this factor, which unfortunately always seems to weigh heavily in gauging the relative merit of any undertaking, adds to the concert's total assets. No longer need the "Messiah" hold exclusive sway.

Members of the audience hearing Haydn's "Creation" for the first time were soon won over by the works dramatic and melodic appeal. A spirited performance did much to enhance their enjoyment. The

solo parts were given professional attention by Willabelle Underwood, Gene Cox, and Paul Matthen. Deserving of special laurels is the chorus, for their singing, which displayed splendid control and dynamic flexibility, was clear and full sounding. The orchestra met its task commendably, but its decided limitations at times made the fulfillment of the score's orchestral demands impossible. All in all, it was evident that Klaus Liepman had spent a great deal of care and energy in rehearsing and polishing. The final product was ample reward.

B.S.O. Rehearsal

The second open rehearsal of the Boston Symphony will be given this Thursday, December 14, at 7:30 p.m. in Symphony Hall. At this time Charles Munch will rehearse the following works for the regular concerts on Friday and Saturday: Haydn's Symphony no. 103 in E-flat major, "The Drum Roll," the Piano Concerto no. 1 in B-flat minor, Opus 23, of Tchaikovsky with the young Italian pianist Aldo Ciccolini as soloist, and two works by Ravel, the "Daphnis et Chloe," Orchestral Suite no. 1 and the Rapsodie Espagnole. As for the first rehearsal program, the Music

Letters to the Editor

Dear Sir:

Last week you succeeded in doing something which we would hardly have believed possible. You made us ashamed of our association with M.I.T. Specifically we are referring to the Hexapoppin Show. We were humiliated by a show which did not contain one bit of good earthy entertainment. All you had to offer was a first-rate jazz combo, a hilarious band from Tufts, and several very entertaining skits put on by various college groups. In trying to avoid giving offense to anyone you succeeded in embarrassing many of us. It was indeed a shameful performance—one more worthy of the gentle "men" up the river, than of the MEN of Technology. . . .

The Bemis Literary, Beer, Chowder, and Marching Society.

Library will again act as an exchange center for those both wanting and selling tickets. If you fall in either of these categories place your name with the music librarian as soon as possible.

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Varsity Grapplers Downed By Harvard; Frosh Beaten

Last Saturday at Rockwell Cage Tech's varsity and frosh teams were downed by Harvard's squads. The score of the varsity match was 21-11, and the outcome of the match was not in doubt at any time. In the frosh match the frosh took an early lead in the lighter weight matches, but the heavier members of the squad were unable to hold the lead and the score ended up 23-11 in favor of Harvard.

Seymour Scores Pin

In the varsity match Tech got off to a very poor start losing the first three bouts by pins for a total of 15 points for Harvard. In the next bout, the defeat of Sinclair Buckstaff, one of the team's mainstays, came as a surprise and proved to be a crushing blow. Tech's Captain, Tom Callahan, turned in a neat win over his opponent for three points and Barton Conant and Chuck Seymour followed with wins for three and five points, respectively. This was the second straight win for each of these men. In pinning his man Seymour scored the only Tech varsity pin of the afternoon.

In the frosh match Harvard picked up five points in the first

bout, however Tech bounced back with a pin by Paul Pollinger and decision wins by Jim Wolfe and Bill Praglusi for Tech's eleven points. After this Tech folded completely losing the next four bouts to Harvard.

Next week the varsity and frosh will wrestle at Tufts.

Results

Varsity
123 lb. Lee (H) defeated Meyers (M.I.T.), pin 3:44.
130 lb. Smith (H) defeated Spero (M.I.T.), pin 2:48.
137 lb. Adams (H) defeated Findlay (M.I.T.), pin 6:37.
147 lb. Ben (H) defeated Buckstaff (M.I.T.), decision 7-2.
157 lb. Callahan (M.I.T.) defeated Anderson (H), decision 7-2.
167 lb. Conant (M.I.T.) defeated Hubbard (H), decision 10-3.
177 lb. Seymour (M.I.T.) defeated Waring (H), pin 7:53.
Unlim. Heldtmann (H) defeated Robertson (M.I.T.), decision 12-2.
Score: Harvard 21, M.I.T. 11.

Freshman
123 lb. Thorne (H) defeated Graef (M.I.T.), pin 2:47.
130 lb. Pollinger (M.I.T.) defeated Kaplan (H), pin 5:06.
137 lb. Wolfe (M.I.T.) defeated Craig, decision 9-2.
147 lb. Praglusi (M.I.T.) defeated Polard (H), decision 3-2.
157 lb. Mortimer (H) defeated Wood (M.I.T.), decision 6-5.
167 lb. Chandler (H) defeated Murkland (M.I.T.), pin 5:00.
177 lb. Waring (H) defeated Strait (M.I.T.), pin 7:22.
Unlim. Booker (H) defeated Gray (M.I.T.), pin 1:10.
Score: Harvard 23, M.I.T. 11.

Engineer Swimmers Lose Second Straight To Brown University

Brown University downed the Tech mermen 42-33 Saturday at Providence despite a 20 point spurt by Tech in the last three events. This was the season opener for Brown and the second straight loss for MIT.

Tech Wins Medley

Captain Bob Pelletier and Baker provided the two individual wins for Tech in the 200 yard breast stroke and the 440 yard free style respectively. The Crimson and gray team of Walsh, Schesser, Hubbard and Baker took the 400 yard free style medley.

This was the first meet in the Colgate Hoyt pool under the new swimming rules that makes the back stroke 200 yards. Fuller of Brown set the pool record of 2:28.4 at the new distance.

Fresh Also Lose

In the companion meet Brown's frosh swimmers downed Tech's frosh for their first loss.

The varsity summary is as follows:

300 yd. medley: Brown (Fuller, Gray, Englehard). Time: 3:12.
220 yd. free: 1st Kemron (B); 2nd Ray (B); 3rd Sorenson (T). Time: 2:25.1.
50 yd. free: 1st Barlow (B); 2nd Mitchell (T); 3rd Munro. Points: 83.3.
100 yd. free: Barlow (B); 2nd Walsh (T); 3rd Allen (B). Time: 54.5.
200 yd. Back: 1st Fuller (B); 2nd Damon (T); 3rd Cornwell (T). Time: 2:28.4.
200 yd. Breast: 1st Pelletier (T); 2nd Arenburg (B); 3rd Wenzel (B). Time: 2:37.3.
440 yd. free style: Baker (T); 2nd Sorenson (T); 3rd Day (B). Time: 5:24.3.
400 yd. relay: Tech (Walsh, Schesser, Hubbard, and Baker). Time: 4:01.8.

Technology Basketeers Bow To Trinity College; Freshmen Also Beaten

Vickers Elected As Cross Country Capt. At Banquet

Charles Vickers of Cambridge, New York, was elected captain of the Technology Cross Country team for next season at the annual cross country banquet last Thursday night. Vickers, a junior at the Institute, has been a letterman for the past two years, although he never participated in the sport before enrolling here. He is also a member of the varsity track team and is studying electrical engineering.

Featured speaker at the banquet was Colonel John W. Fitzpatrick of the Military Science Department, who was a member of the varsity track and cross country teams during his undergraduate days at Penn. State. Coach Oscar Hedlund reviewed this year's undefeated dual meet record, the first at the Institute in five years, and the excellent showing in the New England cross country championships, where the Techmen finished fifth. This year's captain, William Nicholson of the class of '51, presided at the banquet.

The Beaver Hoopsters, fresh from their victory over B.U.'s Terriers, traveled to Hartford last Saturday night to play Trinity College. The Hartford team proceeded to demolish the engineers and when the final whistle blew they had a 66-54 victory.

Trinity Too Tall

At the start of the contest O'Donnell's five leaped to a quick ten-point lead but the overall height of the Trinity squad and their deadly shooting from the outside of the circle soon began to tell, and the Hartford boys took the lead away.

Down at the half, the Engineers came out fighting, but were unable to stem Trinity's power although they held them scoreless for the last eight and a half minutes of the game.

Glantz Stars

Herb Glantz led the scoring for the Techmen. Hohorst looked good under the boards even though the superior overall height of Trinity took the honors in this department. Captain Hong also played a very fine game and his ball stealing was instrumental in keeping the score as close as it was.

Frosh Defeated

In the freshman game which preceded the varsity contest Technology's frosh lost their third straight game. They have yet to enter the win column. The only bright spot of the game for Tech rooters was the excellent ball playing of Al Shultz who racked up fifteen points.

Beaver Squashmen Lose To McGill University 5-2

Technology's squash team went down to defeat last Saturday afternoon at the hands of McGill by a 5-2 score. The match was held on the Tech courts.

Quane (McG) defeated Rudzinski (M.I.T.) 12-15, 15-13, 11-15, 15-13, 18-17.
Rampey (M.I.T.) defeated Dugby (McG) 18-16, 15-8, 15-10.
Quine (McG) defeated Dureher (M.I.T.) 15-12, 16-18, 15-13, 15-11.
Pearce (McG) defeated Porter (M.I.T.) 16-18, 17-15, 15-9, 18-16.
Malani (M.I.T.) defeated Brodeur (McG) 12-15, 15-10, 11-15, 15-8, 15-3.
Black (McG) defeated Geisler (M.I.T.) 12-15, 17-18, 15-10, 15-12, 16-14.

Intramural Results

Sigma Alpha Epsilon won the big game of the week by defeating Pi Lambda Phi 24-15. Pi Lambda Phi, who won the league V title last year, did not use their star, Gill Lewis, and lost their first game this year letting Sigma Alpha Epsilon in undisputed first place. Also in league V Phi Gamma Delta conquered Riverside 32-20 and Phi Lambda Phi defeated Phi Beta Epsilon. In league VI Goodale-Walcott lost two, one to Chi Phi 24-17 and the other to the Pegis Club 25-15.

Leagues I, II, III, IV

In league I Delta Tau Delta dropped one to the Kappa Sigma. 16-8. In league II Delta Psi defeated Theta Delta Chi in a close one 13-12. In league III Sigma Chi won by default from Walker, and the New Dorms A overcame Beta Theta Pi 42-19. In league IV Theta Pi lost to Monroe-Wood 12-4.

WAC

(Continued from Page 1)

of age, seniors or graduate students, who are unmarried and show an aptitude for military service. Further information is available in Room 24-107, and aid will be given there in filling out the application forms, which must be completed by January 5, 1951.

The Second Boston Symphony Rehearsal

Charles Munch—Music Director
will be given on
Thursday
Dec. 14 at 7:30
Haydn—Ravel—Tchaikovsky
Soloist—Aldo Ciccolini
Tickets \$2.00
at Symphony Hall Box Office

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NOTICES

A.S.M.E. Meeting

For its last meeting of this term, A.S.M.E. is sponsoring a talk by Professor Harold E. Edgerton on the "Stroboscope." Details of the National A.S.M.E. Technical Paper Competition will also be discussed at the meeting which will be held today at 5:00 p.m. in Room 10-250.

Chemical Engineers' Dance

The Technology Chapter of A.I.C.H.E. will hold a Christmas Dance on Friday, Dec. 15, 8-12 p.m. The Technicians will play and there will be eggnog and group singing.

L. S. C. Movies

The L.S.C. movie series will present "It Happened One Night," starring Claudette Colbert and Clark Gable and directed by Frank Capra, today at 7:30 p.m. in Room 10-250. Admission price is thirty cents.

Percival Wood — gl

Three cash prizes of \$500, \$300, and \$100 will be awarded to the best thesis in support of the principles of the American Constitution, as part of the Percival Wood Clement Prize Competition. Further details may be obtained from English Department Headquarters.

Operation Octopus

(Continued from Page 1)

the regulation and control of each experiment was developed. The machine, while not yet completed, will, it is hoped, greatly simplify the tasks of the Research Group.

In building the machine, which is known as Octopus, certain considerations had to be observed. The problem, which would be dependent on the machine, could not be trivial, nor time consuming. The messages, which would be sent through the machine, would have to be limited to a few simple categories.

Complicated Patterns Possible

Set up for experimental groups of five persons, the machine sends and receives on a panel of switches and lights which each member of the group has before him. The problem starts with each member being given a number, either 1, or 0, and consists of having each member find out all the numbers, add them up, and give the answer by telling whether the sum is odd or even.

Messages cannot, of course, be sent by everyone to everyone else. This is where the pattern of communication comes in. It is set up and controlled at the master control panel. It can be changed at will, and determines who contacts who.

Messages between any two members of the group cannot only be stopped, but can be twisted also. Thus all, or half, or any part of the messages sent by a group member can be changed to just the opposite of what he sent. This can complicate the pattern quite a bit.

Stops Automatically

Each problem, as it is set up, does not necessarily require that each member of the group get the right answer. The control panel is set before each experiment, and the members may be required to get the correct answer, any answer, or no answer in particular. For example, two of the five group members may be required to give the right answer, two others any answer, while the fifth may have nothing required of him.

When all of the requirements have been satisfied, the machine automatically records the time and lights up a sign on each panel telling the group that the problem has been solved. The messages sent and other data have been recorded, as well as having been observed by the operator on the control panel.

This then is the work of the Human Communications Research Group. When the machine is completed, it should serve as a stride forward in experimental methods in the science of communication. Of course, the machine is limited and makes the area of research quite small, but it is felt that the results obtained will be basic enough to be worthwhile getting, basic for further studies.

Calendar (Continued from Page 2)

TUESDAY, DECEMBER 19

Technology Matrons. The Bridge Group. At the home of Mrs. Ralph Freeman, 985 Memorial Drive, Cambridge, 1:00 p.m.
Tech Model Railroad Club. Business Meeting. Room 20E-214, 5:15 p.m.

WEDNESDAY, DECEMBER 20

Acoustics Laboratory. Seminar: "Some Notes on Electromechanical Reciprocity." Jerome R. Cox, Jr. Room 12-182, 4:00 p.m.
Richard C. MacLaurin Lodge, A.F. and A.M. Meeting. Masonic Temple, 1950 Massachusetts Avenue, Cambridge, 6:00 p.m. All Masons at M.I.T. are cordially invited to attend.

EXHIBITIONS

Photographs by Clarence John Laughlin will be shown in the Lobby of Building 7 through December 14.

Photographic Salon prints by Raymond R. LaPelle of Philadelphia, Pennsylvania, will be on display in the Photographic Service Gallery, Basement of Building 11, through December 24.

An exhibition of Mobile Sculpture by Alexander Calder will be on display in the New Gallery of the Charles Hayden Memorial Library, Monday through Friday, 10:00 a.m. to 5:00 p.m. through January 14, 1951.

CALENDAR OF EVENTS

The Calendar of Events will not be published for the next three weeks, December 20 to January 9. Material for the Calendar, January 10-16, is due in the office of the Editor, Room 7-204, not later than Noon on Thursday, January 4.

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PLACEMENT INFORMATION
COMPANIES COMING FOR INTERVIEWS

Date	Company	Representatives	Courses
Dec. 12	Raytheon Mfg. Co.	Mr. Nile	VIII
12	Firestone Tire & Rubber Co.	Mr. C. W. Gamberdinger	II, VI, X, XV
13	Firestone Tire & Rubber Co.	Mr. C. W. Gamberdinger	II, VI, X, XV
Jan. 9	Allegheny Ludlum Steel Corp.		I, II, III, V, VI, XV, XIV
10	Standard Oil of Ohio	Mr. E. G. Glass	II, X
11	Standard Oil of Ohio	Mr. E. G. Glass	II, X
12	Standard Oil of Ohio	Mr. E. G. Glass	II, X

Companies That Have Set Tentative Dates When They Plan to Come

Dec. 14	Chance Vought Aircraft
15	Chance Vought Aircraft

NOTE: For further information consult Placement Bulletin published weekly and posted on all department bulletin boards. Companies desiring written correspondence for placement offers will be published each Friday in *The Tech*.

Forum

(Continued from Page 1)

istic virtues of seeing himself in relation to his fellow men. Men with these qualities resist all forms of totalitarianism that regiment and depreciate the individual," he continued.

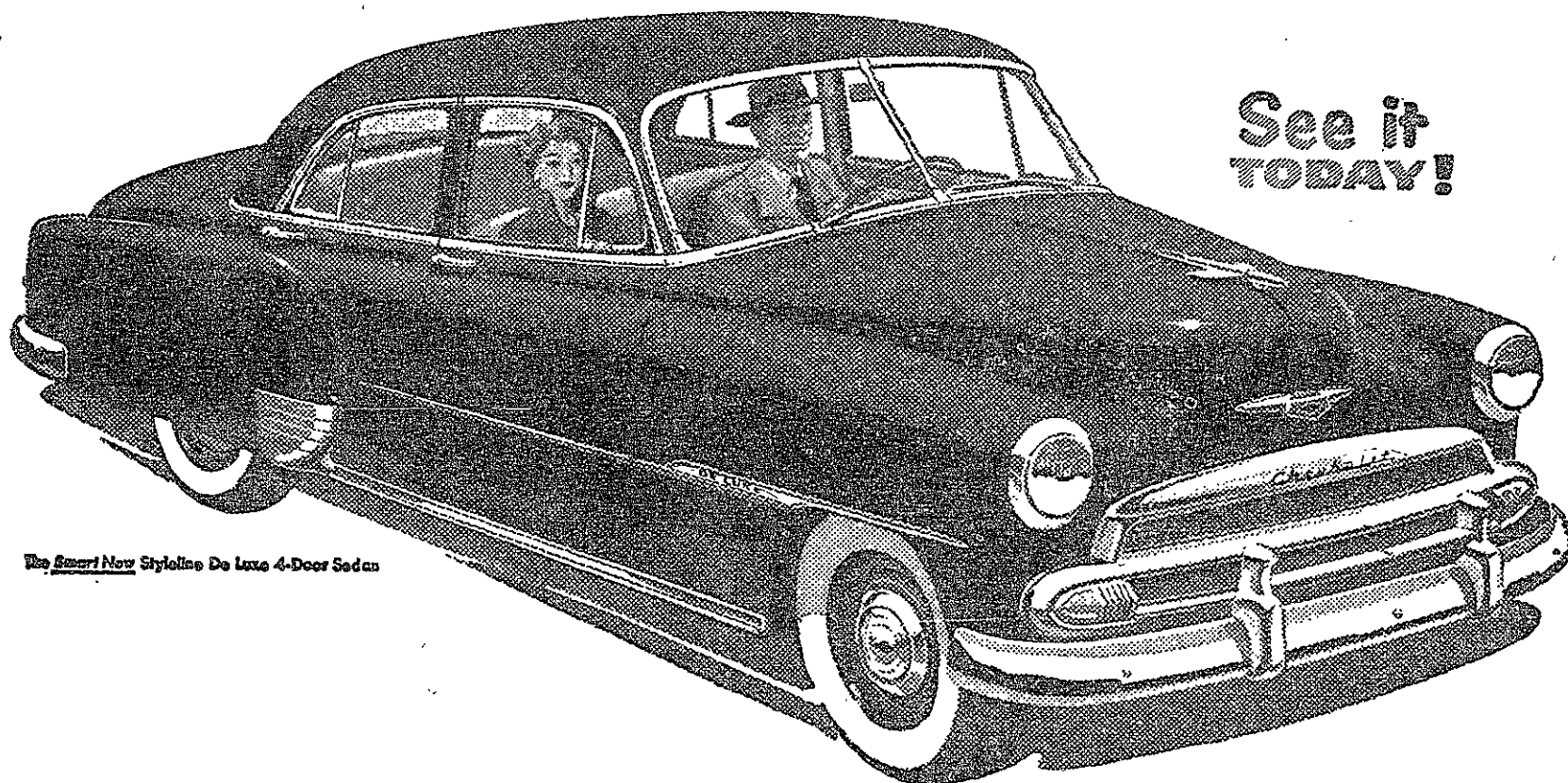
The importance of this attribute, and of an educational program designed to provide for it, was stressed by both Dr. Keenan and Dr. Bixler. They pointed out that it is mandatory to develop in students a scale of values and a competence to live as free individuals.

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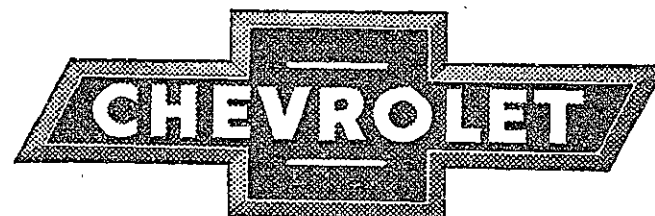
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